

### **Amendments to the Claims**

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) A method comprising:  
determining an age of an equivalence class; and  
cloning the equivalence class based on the age of the equivalence class.
2. (Previously Presented) A method as defined in claim 1, wherein the equivalence class is associated with an escape analysis.
3. (Original) A method as defined in claim 1, wherein determining the age of the equivalence class includes an initialization operation.
4. (Previously Presented) A method as defined in claim 1, wherein determining the age of the equivalence class includes incrementing the age of the equivalence class in response to a cloning operation.
5. (Previously Presented) A method as defined in claim 1, wherein determining the age of the equivalence class includes selecting the age of the equivalence class to be a greater age of first and second ages associated with respective merged equivalence classes.
6. (Currently Amended) A method as defined in claim 1, wherein cloning the equivalence class based on the age of the equivalence class includes associating the equivalence class with one of an old equivalence class ~~and~~ or a young equivalence class.
7. (Original) A method as defined in claim 6, further comprising associating the equivalence class with the old equivalence class in response to the age of the equivalence class being greater than or equal to an age threshold.

8. (Original) A method as defined in claim 6, further comprising associating the equivalence class with the young equivalence class in response to the age of the equivalence class being less than an age threshold.
9. (Original) A system comprising:  
a memory; and  
a processor coupled to the memory and configured to:  
determine an age of an equivalence class; and  
clone the equivalence class based on the age of the equivalence class.
10. (Original) A system as defined in claim 9, wherein the equivalence class is associated with an escape analysis.
11. (Original) A system as defined in claim 9, wherein the processor is configured to determine the age of the equivalence class subsequent to an initialization operation.
12. (Original) A system as defined in claim 9, wherein the processor is configured to determine the age of the equivalence class by incrementing the age of the equivalence class in response to a cloning operation.

13. (Previously Presented) A system as defined in claim 9, wherein the processor is configured to determine the age of the equivalence class by selecting the age of the equivalence class to be a greater age of first and second ages associated with respective merged equivalence classes.

14. (Currently Amended) A system as defined in claim 9, wherein the processor is configured to clone the equivalence class based on the age of the equivalence class by associating the equivalence class with one of an old equivalence class ~~and or~~ a young equivalence class.

15. (Original) A system as defined in claim 14, wherein the processor is configured to associate the equivalence class with the old equivalence class in response to the age of the equivalence class being greater than or equal to an age threshold.

16. (Original) A system as defined in claim 14, wherein the processor is configured to associate the equivalence class with the young equivalence class in response to the age of the equivalence class being less than an age threshold.

17. (Original) A machine accessible medium having instructions stored thereon that, when executed, cause a machine to:

determine an age of an equivalence class; and

clone the equivalence class based on the age of the equivalence class.

18. (Original) A machine accessible medium as defined in claim 17, wherein the equivalence class is associated with an escape analysis.

19. (Original) A machine accessible medium as defined in claim 17 having instructions stored thereon that when executed cause the machine to determine the age of the equivalence class subsequent to an initialization operation.

20. (Previously Presented) A machine accessible medium as defined in claim 17 having instructions stored thereon that when executed cause the machine to determine the age of the equivalence class by incrementing the age of the equivalence class in response to a cloning operation.

21. (Previously Presented) A machine accessible medium as defined in claim 17 having instructions stored thereon that when executed cause the machine to determine the age of the equivalence class by selecting the age of the equivalence class to be a greater age of first and second ages associated with respective merged equivalence classes.

22. (Currently Amended) A machine accessible medium as defined in claim 17 having instructions stored thereon that when executed cause the machine to clone the equivalence class based on the age of the equivalence class by associating the equivalence class with one of an old equivalence class ~~and~~or a young equivalence class.

23. (Previously Presented) A machine accessible medium as defined in claim 22 having instructions stored thereon that when executed cause the machine to associate the equivalence class with the old equivalence class in response to the age of the equivalence class being greater than or equal to an age threshold.

24. (Original) A machine accessible medium as defined in claim 22 having instructions stored thereon that when executed cause the machine to associate the equivalence class with the young equivalence class in response to the age of the equivalence class being less than an age threshold.